UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,704	11/26/2003	Dhrubajyoti Borthakur	5760-16300	7844

35690 7590 06/18/2007

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER	
CAO, PHUONG THAO	

ART UNIT	PAPER NUMBER
2164	

MAIL DATE	DELIVERY MODE
06/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/723,704	BORTHAKUR ET AL.	
	Examiner	Art Unit	
	Phuong-Thao Cao	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22 and 24-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *21 and 22* is/are allowed.

6)☒ Claim(s) *1-20 and 26* is/are rejected.

7)☒ Claim(s) *24-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to Amendment filed on 3/30/2007.

2. Claim 15 has been amended. Currently, claims 1-22 and 24-26 are pending.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 3, 5, 7, 8, 10, 12, 14, 15, 17, 19 and 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6-9, 11, 13-16, 18, 20-22, 26 and 30 of copending Application No. 10/723,729. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 2, 4, 6-9, 11, 13-16, 18, 20-22, 26 and 30 of the copending Application anticipate all limitations of claims 1, 3, 5, 7, 8, 10, 12, 14, 15, 17, 19 and 20 of the instant application. In particular, a file signature, which is calculated based on content of a file and used to identify files in the file system, can be considered as identity of a file; so an operation to access content as claimed in the copending application such as file write operation, which changes the content of the file, thereby changes the file signature, can be broadly interpreted as operation to modify the identify of a file as claimed in the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

5. Applicant's arguments filed 3/30/2007 have been fully considered but only partly persuasive, as follows:

With respect to Applicant's argument regarding "computer-accessible storage medium" in the previous 101 rejection for non-statutory subject matter, this argument is persuasive. Therefore, the 101 rejection is withdrawn.

Regarding Applicant's argument that Howard makes no mention of streams and fails to disclose storing a record of operation to modify an identity of a file within a stream corresponding to that file, this argument is invalid. Howard is combined to the file system of Pudipeddi et al. only for its teaching of in response to detecting an file operation, store a record of said operation.

Regarding Applicant's argument that Patel et al. does not disclose storing records of file identity modification operations in streams, this argument is invalid. The teaching of storing records of file operations is based on the combination of two references (Howard and Patel et al.) wherein Howard teaches storing records of file operations and Patel et al. teaches the functionality of storing data in named streams.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivations or suggestions to combine are provided in the claim rejections.

Regarding Applicant's argument that Howard and Pudipeddi are not properly combinable to make a prima facie case of obviousness, this argument is invalid. In previous rejection, a prima facie case of obviousness is made based on three references Pudipeddi et al., Howard and Patel et al., wherein Pudipeddi et al. is the main reference teaching a file system and features disclosed by Howard and Patel et al. are combined into the system of Pudipeddi et al. enhance its functionalities.

In response to Applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to Applicant's argument that Pudipeddi, Howard and Patel are not properly combinable to make a prima facie case of obviousness, this argument is invalid since Applicant has mistaken Howard as main reference (system) in the combination. The combination of Pudipeddi et al, Howard, and Petal et al. results in modifying the system of Pudipeddi et al. not Howard as argued.

Regarding Applicant's argument that Pudipeddi, Howard and Patel, taken singly or in combination, fail to teach or suggest all the features and limitations of claim 1, Applicant is advised to specify the specific claim limitation(s) that are not taught or disclosed in order to allow Examiner properly addresses the argument.

With respect to Applicant's argument regarding claim 21, this argument is persuasive. Therefore, prior art rejection regarding claim 21 is withdrawn.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 15-20 and 26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Language "executable to" in claim 15 (line 3), claim 17 (line 2), claim 18 (line 2), claim 20 (line 2) and claim 26 (line 2) raises question as to whether the program instructions are executed on computer to perform the steps as recited.

Claims 16 and 19 are rejected as incorporating the deficiencies of independent claim 15 upon which they depend.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-2, 8-9 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pudipeddi et al. (Publication No US 2004/0002942, effective filing date 6/28/2002) in view of Howard (US Patent No 6,098,079 issuing date 8/1/2000) and further in view of Patel et al. (Publication No US 2004/0059866, effective filing date 6/25/2001).

As to claim 1, Pudipeddi et al. teaches:

"A system" (see Abstract) comprising:

"a storage device configured to provide a storage space for data storage" (see Pudipeddi et al., [0026]); and

"a file system configured to map a plurality of files and a plurality of named streams corresponding respectively to said files to said storage space for storage and to manage access to said storage device" (see Pudipeddi et al., [0001], [0019], [0029] and [0038]),

"wherein said named streams are configured to store metadata corresponding respectively to said files" (see Pudipeddi et al., [0038] for stream control block (SCB) 324 as example of a named stream associated with a file), and wherein said file system is configured to:

"detect an operation to modify an identity of a first one of said files" (see Pudipeddi et al., [0001], [0032], and [0043] wherein ability to view file system request is interpreted as ability to detect file operations including rename operation as an example of operation to modify an identify of a file as in Applicant's claim language).

Pudipeddi et al. does not teach "in response to detecting said operation, store a record of said operation wherein said record includes a signature corresponding to said first file".

Howard teaches "in response to detecting said operation, store a record of said operation wherein said record includes a signature corresponding to said first file" (see Howard, Abstract, Fig. 5, [column 3, lines 25-50] and [column 5, lines 1-20] wherein each version entry in the journal files is equivalent to Applicant's "record of said operation", and the hash code or digest computed from the contents of a file is equivalent to Applicant's "signature").

It would be obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Howard to the system of Pudipeddi et by adding the feature of in response to detecting said operation, store a record of said operation wherein said record including a signature corresponding to said first file. A skilled artisan would have been motivated to do so to provide the system with the ability to effectively monitor and control the access (operations) to the file system; thereby enhance the effectiveness of the system. In addition, both the references (Pudipeddi et al. and Howard) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as file system with ability to detect and operate on files in the system. This close relation between both of the references highly suggests an expectation of success.

Pudipeddi et al. and Howard do not teach "store a record of said operation within a respective one of said named streams corresponding to said first file."

Patel et al. teach the ability to store data on a named data stream (see Patel et al., [0011]).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Patel et al. to the system of Pudipeddi et al. by storing a record of said operation within a respective one of said named streams corresponding to said first file. A skilled artisan would have been motivated to do so based on the teaching of Patel et al., suggested named tream as a place to store data related to file in order to provide an effective and convenient way to monitor and review all operations occurring to a file. In addition, both the references (Pudipeddi et al. and Patel et al.) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as file systems with files associated with

data streams. This close relation between both of the references highly suggests an expectation of success.

As to claim 8, Pudipeddi et al. teaches:

"A method" (see Abstract) comprising:

"storing a plurality of files" (see Pudipeddi et al., [0019] for file system); and

"a file system mapping a plurality of files and a plurality of named streams corresponding respectively to said files to a storage space for data storage provided by a storage device, wherein said file system is configured to manage access to said storage device" (see Pudipeddi et al., [0001], [0019], [0029] and [0038]),

"and wherein said named streams are configured to store metadata corresponding respectively to said files" (see Pudipeddi et al., [0038] for stream control block (SCB) 324 as example of a named stream associated with a file);

"said file system detecting an operation to modify an identity of a first one of said files" (see Pudipeddi et al., [0001], [0032], and [0043] wherein ability to view file system request is interpreted as ability to detect file operations including rename operation as an example of operation to modify an identify of a file as in Applicant's claim language).

Pudipeddi et al. does not teach "in response to detecting said operation, said file system storing a record of said operation wherein said record includes a signature corresponding to said first file".

Howard teaches "in response to detecting said operation, said file system storing a record of said operation wherein said record includes a signature corresponding to said first file" (see

Howard, Abstract, Fig. 5, [column 3, lines 25-50] and [column 5, lines 1-20] wherein each version entry in the journal files is equivalent to Applicant's "record of said operation", and the hash code or digest computed from the contents of a file is equivalent to Applicant's "signature").

It would be obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Howard to the system of Pudipeddi et by adding the feature of in response to detecting said operation, store a record of said operation wherein said record including a signature corresponding to said first file. A skilled artisan would have been motivated to do so to provide the system with the ability to effectively monitor and control the access (operations) to the file system; thereby enhance the effectiveness of the system. In addition, both the references (Pudipeddi et al. and Howard) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as file system with ability to detect and operate on files in the system. This close relation between both of the references highly suggests an expectation of success.

Pudipeddi et al. and Howard do not teach "storing a record of said operation within a respective one of said named streams corresponding to said first file."

Patel et al. teach the ability to store data on a named data stream (see Patel et al., [0011]).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Patel et al. to the system of Pudipeddi et al. by storing a record of said operation within a respective one of said named streams corresponding to said first file. A skilled artisan would have been motivated to do so based on the teaching of Patel et al., suggested named tream as a place to store data related to file in order to provide an effective and

convenient way to monitor and review all operations occurring to a file. In addition, both the references (Pudipeddi et al. and Patel et al.) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as file systems with files associated with data streams. This close relation between both of the references highly suggests an expectation of success.

As to claim 15, Pudipeddi et al. teaches:

"A tangible, computer-accessible storage medium comprising program instructions" (see Pudipeddi et al., Abstract and [0026]), wherein the program instructions are computer-executable to implement:

"a file system mapping a plurality of files and a plurality of named streams corresponding respectively to said files to a storage space for data storage provided by a storage device, wherein said file system is configured to manage access to said storage device" (see Pudipeddi et al., [0001], [0019], [0029] and [0038]),

"and wherein said named streams are configured to store metadata corresponding respectively to said files" (see Pudipeddi et al., [0038] for stream control block (SCB) 324 as example of a named stream associated with a file);

"said file system detecting an operation to modify an identity of a first one of said files" (see Pudipeddi et al., [0001], [0032], and [0043] wherein ability to view file system request is interpreted as ability to detect file operations including rename operation as an example of operation to modify an identify of a file as in Applicant's claim language).

Pudipeddi et al. does not teach "in response to detecting said operation, said file system storing a record of said operation wherein said record includes a signature corresponding to said first file".

Howard teaches "in response to detecting said operation, said file system storing a record of said operation wherein said record includes a signature corresponding to said first file" (see Howard, Abstract, Fig. 5, [column 3, lines 25-50] and [column 5, lines 1-20] wherein each version entry in the journal files is equivalent to Applicant's "record of said operation", and the hash code or digest computed from the contents of a file is equivalent to Applicant's "signature").

It would be obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Howard to the system of Pudipeddi et by adding the feature of in response to detecting said operation, store a record of said operation wherein said record including a signature corresponding to said first file. A skilled artisan would have been motivated to do so to provide the system with the ability to effectively monitor and control the access (operations) to the file system; thereby enhance the effectiveness of the system. In addition, both the references (Pudipeddi et al. and Howard) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as file system with ability to detect and operate on files in the system. This close relation between both of the references highly suggests an expectation of success.

Pudipeddi et al. and Howard do not teach "store a record of said operation within a respective one of said named streams corresponding to said first file."

Patel et al. teach the ability to store data on a named data stream (see Patel et al., [0011]).

It would be obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Patel et al. to the system of Pudipeddi et al. by storing a record of said operation within a respective one of said named streams corresponding to said first file. A skilled artisan would have been motivated to do so based on the teaching of Patel et al., suggested named tream as a place to store data related to file in order to provide an effective and convenient way to monitor and review all operations occurring to a file. In addition, both the references (Pudipeddi et al. and Patel et al.) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as file systems with files associated with data streams. This close relation between both of the references highly suggests an expectation of success.

As to claims 2, 9 and 16, these claims are rejected based on arguments given above for rejected claims 1, 8 and 15 respectively, and are similarly rejected including the following:

Pudipeddi et al., Howard and Patel et al. teach:

"wherein said operation corresponds to a file create operation, a file delete operation, a file rename operation, or a file copy operation" (see Pudipeddi et al., [0043] and [0068]).

10. Claims 3-4, 10-11 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pudipeddi et al. (Publication No US 2004/0002942, effective filing date 6/28/2002) in view of Howard (US Patent No 6,098,079 issued on 8/1/2000) and in view of Patel et al. (Publication No US 2004/0059866, effective filing date 6/25/2001) as applied to claims 1, 8 and 15

respectively above and further in view of Santry et al. ("Deciding when to forget in the Elephant file system", ACM: 1999).

As to claims 3, 10 and 17, these claims are rejected based on arguments given above for rejected claims 1, 8 and 15 respectively, and are similarly rejected including the following:

Pudipeddi et al., Howard and Patel et al. do not teach "wherein said file system comprises a history stream, and wherein said file system is further configured to stored an indication of said operation in said history stream in response to storing said record in said respective named stream corresponding to said first file"

Santry et al. teaches "wherein said file system comprises a history stream, and wherein said file system is further configured to stored an indication of said operation in said history stream in response to storing said record in said respective named stream corresponding to said first file" (see Santry et al., [page 111, column 2, section 2.2] and [page 111, column 1, paragraph 5] for the history which is equivalent to Applicant's "history stream" and there must include an indication of each type of operation in the history to allow undoing the change).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Pudipeddi et al., Howard and Patel et al. by the teaching of Sandy et al. to add the feature of including a history stream and storing an indication of said operation in said history stream. A skilled artisan would have been motivated to do so to provide users the ability to undo their operations as suggested in Sandy et al., [page 111, section 2.2]), and the file system protecting users from their mistakes is more effective.

As to claims 4, 11 and 18, these claims are rejected based on arguments given above for rejected claims 3, 10 and 17 respectively, and are similarly rejected including the following:

Pudipeddi et al., Howard, Patel et al. and Sandy et al. teach "wherein said file system is further configured to scan said history stream independently of detecting operations to modify identities of ones of said plurality of files, and in response to detecting said indication of said operation in said history stream, to store said record of said operation in a database configured to store a plurality of entries, wherein said database is further configured to response to a query of said plurality of entries" (see Sandy et al., [page 114, column 2, paragraph 1-2] wherein name logs and inode logs are equivalent to Applicant's "database" and see [page 117, column 1, paragraph 1] for ability to access file history for data store).

11. Claims 5-6, 12-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pudipeddi et al. (Publication No US 2004/0002942, effective filing date 6/28/2002) in view of Howard (US Patent No 6,098,079 issued on 8/1/2000) and in view of Patel et al. (Publication No US 2004/0059866, effective filing date) as applied to claims 1, 8, 15 respectively above, and further in view of Richard et al. (Publication No US 2005/0015461, effective filing date 7/17/2003).

As to claims 5, 12 and 19, these claims are rejected based on arguments given above for rejected claims 1, 8 and 15 respectively, and are similarly rejected including the following:

Pudipeddi et al., Howard and Patel et al. do not teach "wherein said record is stored in extensible markup language (XML) format."

Richard et al. teaches "wherein said record is stored in extensible markup language (XML) format" (see Richard et al., [0094]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Pudipeddi et al., Howard and Patel et al. by the teaching of Richard et al. to add the feature of storing records in extensive markup language (XML) format. A skill artisan would have motivated to do so since XML is well known in the art as an interface language to store and communicate data between systems.

As to claims 6 and 13, these claims are rejected based on arguments given above for rejected claims 1 and 8 respectively, and are similarly rejected including the following:

Pudipeddi et al., Howard and Patel et al. do not teach "wherein said signature is computed according to the Message Digest 5 (MD5) algorithm."

Richard et al. teaches "wherein said signature is computed according to the Message Digest 5 (MD5) algorithm" (see Richard et al., [0056]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Pudipeddi et al., Howard and Patel et al. by the teaching of Richard et al. to add the feature of using the Message Digest 5 (MD5) algorithm to compute signature. A skilled artisan would have motivated to do so since Message Digest 5 (MD5) algorithm is a well-known method used in the art to compute the signature of the file.

12. Claims 7, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pudipeddi et al. (Publication No US 2004/0002942, effective filing date 6/28/2002) in view of

Howard (US Patent No 6,098,079 issued on 8/1/2000) and in view of Patel et al. (Publication No US 2004/0059866, effective filing date 6/25/2001) as applied to claim 1, 8 and 15 respectively above, and further in view of Reynolds et al. (US Patent No 6, 286, 013 issued on 9/4/2001).

As to claims 7, 14 and 20, these claims are rejected based on arguments given above for rejected claims 1, 8 and 15 respectively, and are similarly rejected including the following:

Pudipeddi et al., Howard and Patel et al. do not teach "wherein subsequent to storing said record, said file system is further configured to associate said record with a second one of said files in response to detecting a second operation to modify the identity of said first file, wherein said second operation corresponds to a file copy operation specifying said first file as a copy source and said second file as a copy destination."

Reynolds et al. teaches "wherein subsequent to storing said record, said file system is further configured to associate said record with a second one of said files in response to detecting a second operation to modify the identity of said first file, wherein said second operation corresponds to a file copy operation specifying said first file as a copy source and said second file as a copy destination" (see Renolds et al., [column 12, lines 30-43] wherein packet of information is equivalent to Applicant's "said record").

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Pudipeddi et al., Howard and Patel et al. by the teaching of Reynolds et al. to add the feature of subsequent to storing said record, said file system is further configured to associate said record with a second one of said files in response to detecting a second operation to modify the identity of said first file, wherein said second operation

corresponds to a file copy operation specifying said first file as a copy source and said second file as a copy destination. A skilled artisan would have motivated to do so since associating said record with a second file as disclosed provides an effective way to identify the relationship between the two files.

Allowable Subject Matter

13. Claims 21 and 22 are allowed.

14. Claim 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. Claims 24-26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuong-Thao Cao
Art Unit 2164
June 8, 2007

SAM RIMELL
PRIMARY EXAMINER